

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

July 25, 2013

Via E-mail

Mr. David E. Lazovsky President, Chief Executive Officer and Director Intermolecular, Inc. 3011 North First Street San Jose, California 95134

Re: Intermolecular, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2012

Filed March 4, 2013

Form 8-K dated April 25, 2013

Filed April 25, 2013 File No. 001-35348

Dear Mr. Lazovsky:

We have reviewed your filings and have the following comment. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 8-K Dated April 25, 2013

1. We note that you present the non-GAAP information and the related reconciliation required by S-K Item 10(e) in the form of an "adjusted" income statement. Please tell us how your presentation considers the guidance set forth in Compliance and Disclosure Interpretation 102.10. Under the cited guidance, it is generally not appropriate to present a non-GAAP income statement for purposes of reconciling non-GAAP measures to the most directly comparable GAAP measures.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of Mr. David E. Lazovsky Intermolecular, Inc. July 25, 2013 Page 2

1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640, or me at (202) 551-3676, if you have any questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

/s/ Brian Cascio

Brian Cascio Accounting Branch Chief